

## ABSTRACT

The present invention includes a method to determine the immune status of an animal that includes the steps of (a) contacting a biological specimen of the animal with a recombinant infectious agent antigen that is specific for detecting an antibody selective for that infectious agent, under conditions suitable for formation of a complex between the recombinant antigen and the antibody and (b) detecting the presence or absence of the complex, wherein presence or absence of a complex is indicative of the immune status of the animal. Preferably such a method indicates whether the animal should be vaccinated. The present invention also includes an assay comprising (a) a recombinant infectious agent antigen that is specific for detecting an antibody selective for that infectious agent; and (b) a means to detect an antibody that selectively binds to the recombinant antigen. Also included in the present invention are recombinant antigens and nucleic acid molecules encoding such antigens as well as methods to produce and use such nucleic acid molecule and recombinant antigens.